

**CLAIMS:**

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~~1. An improved print image, comprising:  
 an original image of original pixels; and,  
 auxiliary pixels;  
 where a first auxiliary pixel of said auxiliary pixels is in replacement  
 of an original pixel of said original pixels for enhancing the printing of  
 the original image.~~

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~~2. The improved print image of claim 1, wherein the first auxiliary pixel  
 comprises a "black" auxiliary pixel.~~

3. The improved print image of claim 1, wherein the first auxiliary pixel  
 comprises a "white" auxiliary pixel.

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~~4. The improved print image of claim 1, the original image further  
 comprising an original image shape, wherein the first auxiliary pixel is  
 adjacent to the original image shape.~~

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~~5. The improved print image of claim 1, the original image further  
 comprising an original image shape, wherein the first auxiliary pixel is  
 interior to the original image shape.~~

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~~6. The improved print image of claim 1, the original image further  
 comprising an original image shape or line, wherein the first auxiliary  
 pixel is exterior to the original image shape.~~

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~~7. The improved print image of claim 6, further comprising a second  
 auxiliary pixel, wherein the first auxiliary pixel and the second auxiliary  
 pixel are spaced from the image.~~

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~~8. The improved print image of claim 7, the first auxiliary pixel and the  
 second auxiliary pixel being equally distant from the original image  
 shape.~~

9. The improved print image of claim 8, wherein the first auxiliary pixel and the second auxiliary pixel are at least one pixel distant from the original image shape.

10. The improved print image of claim 8, wherein the first auxiliary pixel and the second auxiliary pixel are at least two pixels distant from the original image.

11. The improved print image of claim 4, wherein the first auxiliary pixel adjacent the original image is deployed as a RET type so as to smooth out jagged stair-case transitions.

12. The improved print image of claim 1, wherein a pattern of auxiliary pixels is substituted for a corresponding pattern of original pixels in the original image.

13. The improved print image of claim 12, wherein the pattern of auxiliary pixels is clustered about a shape edge found in the original image.

14. The improved print image of claim 13, wherein the clustered auxiliary pixels are in a checkerboard pattern.

15. The improved print image of claim 12, wherein the pattern of auxiliary pixels is a dispersed array close to a shape edge found in the original image.

16. A method for improving the printing of an image, said method including:

receiving a source image of original pixel data; and,  
processing the source image original pixel data to embed auxiliary pixels therein.

17. The method for improving the printing of an electrostatic image of claim 16, wherein the processing involves morphologically manipulating the original pixel data to substitute auxiliary pixels for original data pixels.

18. The method for improving the printing of an electrostatic image of claim 17, wherein morphologically manipulating comprises:

storing the source image in a first memory space;  
replicating the source image as a working image in a second memory space;  
dilating the working image to produce a first resultant working image;  
outlining the first resultant working image to produce outline pixels in a second resultant working image;  
substituting auxiliary pixels for the outline pixels in the second resultant working image; and,  
performing an OR operation of the second resultant working image with the source image in the first memory space, to thus produce auxiliary pixels in the source image at those pixel locations corresponding to the outline data in the second resultant working image.

19. In a digital imaging system receiving document images, a method for optimizing a rendition thereof, comprising:

receiving a document image representation in a form suitable for processing; and,

processing the document image in an image processing system to embed auxiliary pixels therein in order to improve the rendition of such document image.

20. The digital imaging system of claim 19, wherein the image processing system includes, a digital front end.

21. The digital imaging system of claim 19, wherein the processing includes morphologically manipulating the document image.

22. The digital imaging system of claim 21, wherein morphological manipulation comprises:

storing the document image in a first memory space;

replicating the document image as a working image in a second memory space;

dilating the working image to produce a first resultant working image;

outlining the first resultant working image to produce outline pixels in a second resultant working image;

substituting auxiliary pixels for the outline pixels in the second resultant working image; and,

performing an OR operation of the second resultant working image with the document image in the first memory space, to thus produce auxiliary pixels in the stored document image at those pixel locations corresponding to the outline data in the second resultant working image.